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AIR MOBILITY COMMAND

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Transportation

CIVIL RESERVE AIR FLEET LOAD PLANNING GUIDE MCDONNELL DOUGLAS DC-8

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This volume implements AFPD 24-2, Preparation and Movement of Air Force Materiel, and provides information needed to load plan a portion of the Civil Reserve Air Fleet (CRAF). Aircraft discussed in this volume is the narrow-body McDonnell Douglas DC-8. Provisions of this volume applies to Active Duty, National Guard, Military Reserve Units and other government agencies while utilizing commercial aircraft during contingencies.

This volume of AMCP 24-2 is intended for use as a load planning guide. Equipment listed is dimensionally compatible with all McDonnell Douglas DC-8 aircraft and cargo areas discussed. Final approval of the procedures in this publication, however, ultimately rests with the individual contractor providing airlift services to the DoD. When new or additional information is received from the manufacturer, it will be provided as a change to this publication.

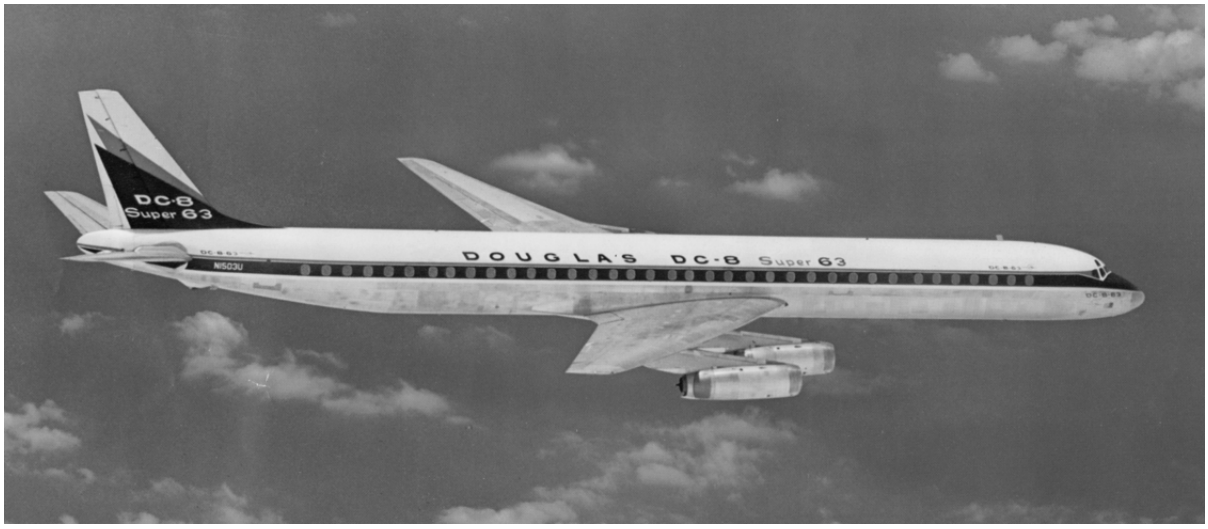
SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

The information contained herein is identical to the information in the previous pamphlet broken down into a more manageable file size. No data has changed. Users of this volume should print volume one which deals with the Administration, Policies, Specialized Loading Support Equipment, and Passenger, and Baggage Loading.

1. General Description. Variations depend upon aircraft series, spacing of the seats, individual aircraft configurations, and contract requirements. In general, the DC-8-62F/CF has 14 pallet positions, and the DC-8-61CF, DC-8-63F/CF, DC-8-71CF, DC-8-73F/CF have 18 pallet positions. Door size and rounded contour of the floor limits the lower lobes to loose baggage or small cargo or equipment. A main deck pallet subfloor is required for rolling stock. NOTE: Users are encouraged to limit the main deck only to bulk, single-pallet cargo. The transport of rolling stock requires carrier authorization and guidance. (For general planning information, see **Figure 2.**).

Figure 1. McDonnell Douglas DC-8.



2. Passenger Seating. The actual number of seats available on the DC-8 varies by model and spacing requirements. HQ AMC/DOYA normally contracts for 110 passengers when requesting commercial aircraft for exercises and contingencies. This number also applies to users of the DC-8 when estimating the applicability of an aircraft for their exercises. **Figure 3.** provides typical seating arrangements that may be seen on CRAF DC-8 aircraft.

3. Maximum Payload. The maximum payload is computed without regard to cargo density and is limited by aircraft structural limitations. The maximum structural payload for each DC-8 is in **Figure 2.** However, for many aircraft the maximum usable payload is less. The contract ACL is the weight HQ AMC/DOKA uses when determining the applicable aircraft that should be used for exercises. This is a reasonable ACL a user could expect for exercises using a limited number of aircraft. Range and payload information are in **Attachment 1** and **Attachment 2** which is helpful in planning for specific employment missions.

4. Cargo Door Dimensions and Cargo Restrictions. The main cargo door is located on the forward left side of the fuselage. The door is 140 inches wide by 85 inches high. The recommended maximum height for pallets or rolling stock is 79.5 inches measured from the top of the pallet or subfloor. (See **Figure 7.**) In general, DC-8s are most effectively used to haul palletized bulk cargo. Although rolling stock may fit through the door and into the cargo area, there is a high chance of damage to the aircraft fuselage and the load time is excessive. When planning to transport rolling stock items, it is recommended that users contact a specific carrier for authorization and planning guidance. Contact HQ AMC/DOF for the specific carrier's operation center. Other outsized cargo may be loaded on the main deck. (See **Table 1.** for maximum length, width, and height combinations.)

5. Main Deck Pallet Configuration. Due to floor limitations, all military cargo on the main deck must be palletized or on a palletized or shored subfloor. Normally, the subfloor consists of standard 463L pallets or wooden boards at least 2 inches thick. The aircraft rail system is capable of accepting 125-inch commercial pallets or 108-inch wide military pallets. Both side cargo rails may be moved inboard 8.5 inches to allow for centerline loading, or the left cargo rail may be moved 17 inches inboard to allow for pallets to be loaded on the right side. The aft most pallet must be loaded with the 88-inch side facing for-

ward and aft. ***NOTE:*** Due to the different pallet restraint rail configurations the DC-8 affords, it is imperative that users contact the specific carrier for pallet profile guidance. This coordination is critical for DC-8 cargo operations. All pallet profile heights are based on height of cargo door and ceiling minus 1 1/4 inches for roller, minus 2 1/4 inches for pallet, minus 2 inches top clearance. See **Figure 6.** for pallet profiles.

6. Main Deck Maximum Pallet Weights . **Figure 4.** lists the maximum weight that can be placed on any one 463L pallet on the DC-8. Maximum payloads for the aircraft are found in **Figure 2.** DC-8 General Information.

7. Lower Lobe Compartments. The DC-8 has two cargo compartments in the lower level. The front lower compartment and aft lower compartments have two access doors with a divider in each. This divider may be moved, depending on the particular aircraft configuration. The lower compartments have a rounded belly and cannot be loaded with pallets. The compartments are usually loaded with small, hand transportable cargo items or baggage. These items may be loaded directly onto the floor of the DC-8. (***EXCEPTION:*** Heavyweight items such as toolboxes should not be placed directly on the floor.) Maximum floor weight bearing capability is 120 pounds per square foot. ***NOTE:*** The combination of main deck and lower compartment weights must not exceed the main deck limits outlined in **Figure 4.** Due to the lower lobe compartment door opening and closing arch, users are advised that the area immediately adjacent to the belly doors is unusable. This area represents an approximate 18 percent loss of space.

8. Compatible Cargo. The following are some examples of larger pieces of equipment that may be loaded on the main deck:

Nomenclature	**Main Deck**	**Lower Compartment**
Type		Baggage*/Small Cargo Items
Description		
Configuration		
Operational		
Length X Width X Height		
Weight		
Type	TTU 228E	Baggage*/Small Cargo Items
Description	Hydraulic test mule	
Configuration	Operational	
Length X Width X Height	127 X 84 X 72 inches	
Weight	5,580 pounds	
Type	M32A-60	Baggage*/Small Cargo Items
Description	Aircraft power unit	

Nomenclature	Main Deck	Lower Compartment
Configuration	Operational	
Length X Width X Height	119 X 68 X 68 inches	
Weight	3,460 pounds	

***NOTE:** The lower compartments have a rounded floor that is not conducive to the use of shoring or rolling stock equipment. Their use should be limited to equipment that may be loaded by hand and does not exceed 250 pounds. (See **Figure 7.** for allowable dimensions.)

9. Loading Sequence. The front of the aircraft must be loaded first to prevent the aircraft from settling on its tail. For cargo DC-8s, recommend placing approximately 5,000 pounds of cargo in pallet position number 1 prior to loading the rest of the aircraft. Except for DC-8-62 models, a tailstand must be used for all onloading and offloading. For passenger aircraft, 40 percent of the baggage weight should be placed in the forward lower compartments and 60 percent of the baggage weight in the aft lower compartments. Lower compartment loading sequence is the following: Load through door 3, then door 1, then door 4, then door 2. This is the routine method of loading. Remember, carrier representatives have final authority on the loading sequence.

10. Placement of Hazardous Materials. All hazardous materials planned for DC-8 aircraft must be placed in pallet position number 1 for aircrew access during in-flight emergencies.

11. Tie-Down Equipment. For general planning purposes, the following tie-down equipment should be available for loading the DC-8 (maximum loading configuration of rolling stock) ***NOTE***: Movement of rolling stock items is not encouraged and authorizations to do so rests solely with carrier.

Type Aircraft	5K Straps	10K Chains and Devices
DC-8-61CF (18 pallets)	220	50
DC-8-63F/CF (18 pallets)	220	50
DC-8-71CF (18 pallets)	220	50
DC-8-73F/CF (18 pallets)	220	50
DC-8-62CF (14 pallets)	175	50

12. Loading Times and Crews. (See AMCP 24-2 Volume I, paragraph 2.6. for contract airlift load times). Typical loading times vary greatly depending on the experience of the crew in loading a DC-8. In general, the following may be used as a guideline based on a 7-member crew loading lower compartments and a 7-member crew working the main deck.

—Reconfigure pallet locks (as required) main deck	+ 15 to + 30
—Rolling Stock:	
—Install subfloor main deck	+ 30 to + 45
—Loading main deck with rolling stock	1 + 30 to 2 + 00
—Palletized bulk	+ 45 to 1 + 00
—Loading baggage into lower compartments by hand	+ 30 to + 45

Figure 2. General Aircraft Information

DC-8 GENERAL INFORMATION

(NOTE: Main deck door is on left side; lower compartment doors are on right side)

AIRCRAFT	A	B	C	D 1/	E	TURNING RADIUS 2/	RWY 180° TURN 3/	MIN RWY WIDTH 4/	MIN TXWY WIDTH 4/	CG RANGE	FUEL GAL/HR/ 5/	BLOCK SPEED 5/
DC-8-61CF	187' 5"	43'	142' 5"	55"	23' 6"	106' 6"	112' 5"	90'	50'	862-920	2100	450
DC-8-62CF	157' 5"	43'	148' 5"	50"	23' 6"	111' 8"	115'	90'	50'	825-925	2100	450
DC-8-63F/CF	187' 5"	43'	148' 5"	50"	23' 6"	111' 5"	132'	90'	50'	855-912	2100	450
DC-8-71CF (PAX)	187' 5"	43'	142' 5"		23' 6"	106' 6"	112' 5"	90'	50'	---	1800	429
DC-8-71CF (CARGO)	187' 5"	43'	142' 5"		23' 6"	106' 6"	112' 5"	90'	50'	862-920	1800	429
DC-8-73CF (PAX)	187' 5"	43'	148' 5"		23' 6"	111' 5"	132'	90'	50'	---	1875	437
DC-8-73-F/CF (CARGO)	187' 5"	43'	148' 5"		23' 6"	111' 5"	132'	90'	50'	855-912	1875	437

AIRCRAFT	DESIGN WEIGHTS				S/T MAX PAYLOAD 6/	S/T CONTRACT ACL/PAX	SEATS 7/	PALLETS		LCN 1/	GEAR TYPE
	MAX T/O	MAX LAND	ZERO FUEL	OPERATING				MIL 88x108	COMM 88x125		
DC-8-61CF 8/	325,000	250,000	234,000	147,000	43.5 (CARGO)	---	---	18	18	74	TT
DC-8-62/F/CF 8/	350,000	250,000	230,000 9/	140,000	45.0	45/	170-189	14	14	79	TT
DC-8-63F/CF 8/	355,000	275,000	261,000 9/	147,000	54.9	45/	---	18	18	80	TT
DC-8-71CF (PAX)	328,000	258,000	244,000	167,300	38.1	/235	254	---	---	74	TT
DC-8-71CF (CARGO)	328,000	258,000	244,000	152,400	45.8	45/	---	18	18	74	TT
DC-8-73CF (PAX)	355,000	275,000	261,000	170,200	45.4	/235	254	---	---	80	TT
DC-8-73F/CF (CARGO)	355,000	275,000	261,000	155,200	55.0 (F) 52.9 (CF)	45/	---	18	18	80	TT

NOTES:
1/ Based on maximum taxi weight.
2/ From pivot point of aircraft to most distant point on fuselage/wing.
3/ Based on distance needed for wheels to remain on runway for a 180° turn.
4/ To be used as a guide only. Individual carrier will make final determination.
5/ Based on a 3500 NM leg.
6/ Maximum payload is based on aircraft structural payload. See Attachment 1 for range payloads.
7/ Numbers are for typical seating arrangements. See paragraph 9-2 for passenger planning factors.
8/ Data for the convertible models are given for the cargo configuration. For planning purposes, the aircraft will be used in this configuration.
9/ Verify ACLs with the specific carrier when using these models.

Figure 3. Typical Passenger Seating Arrangement.

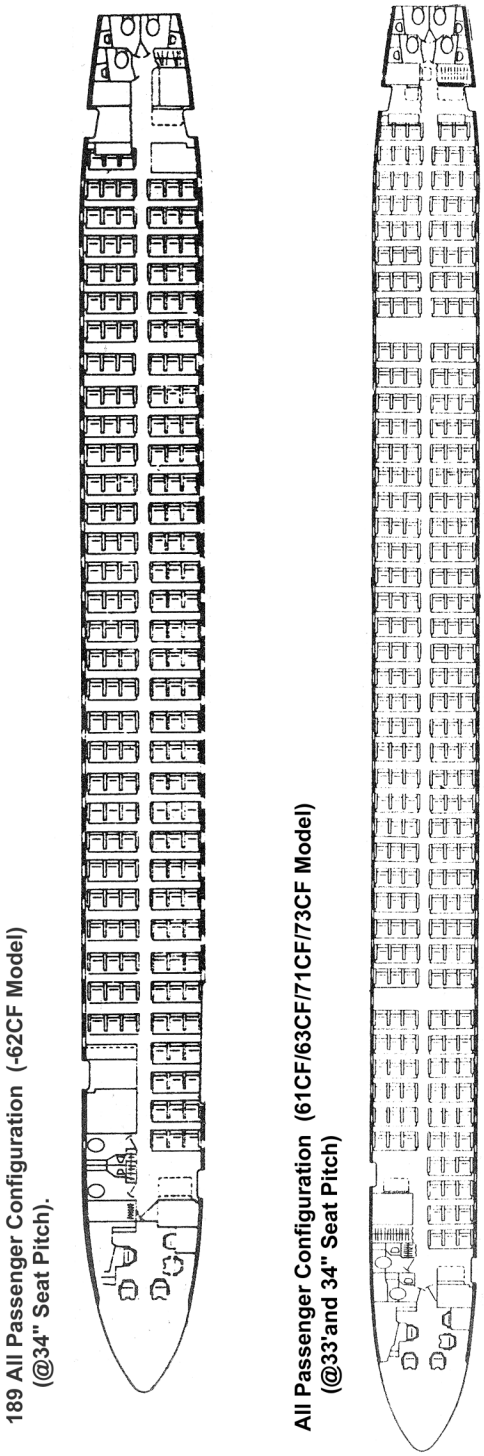


Figure 4. DC 8 Maximum Pallet Weights, All Series.

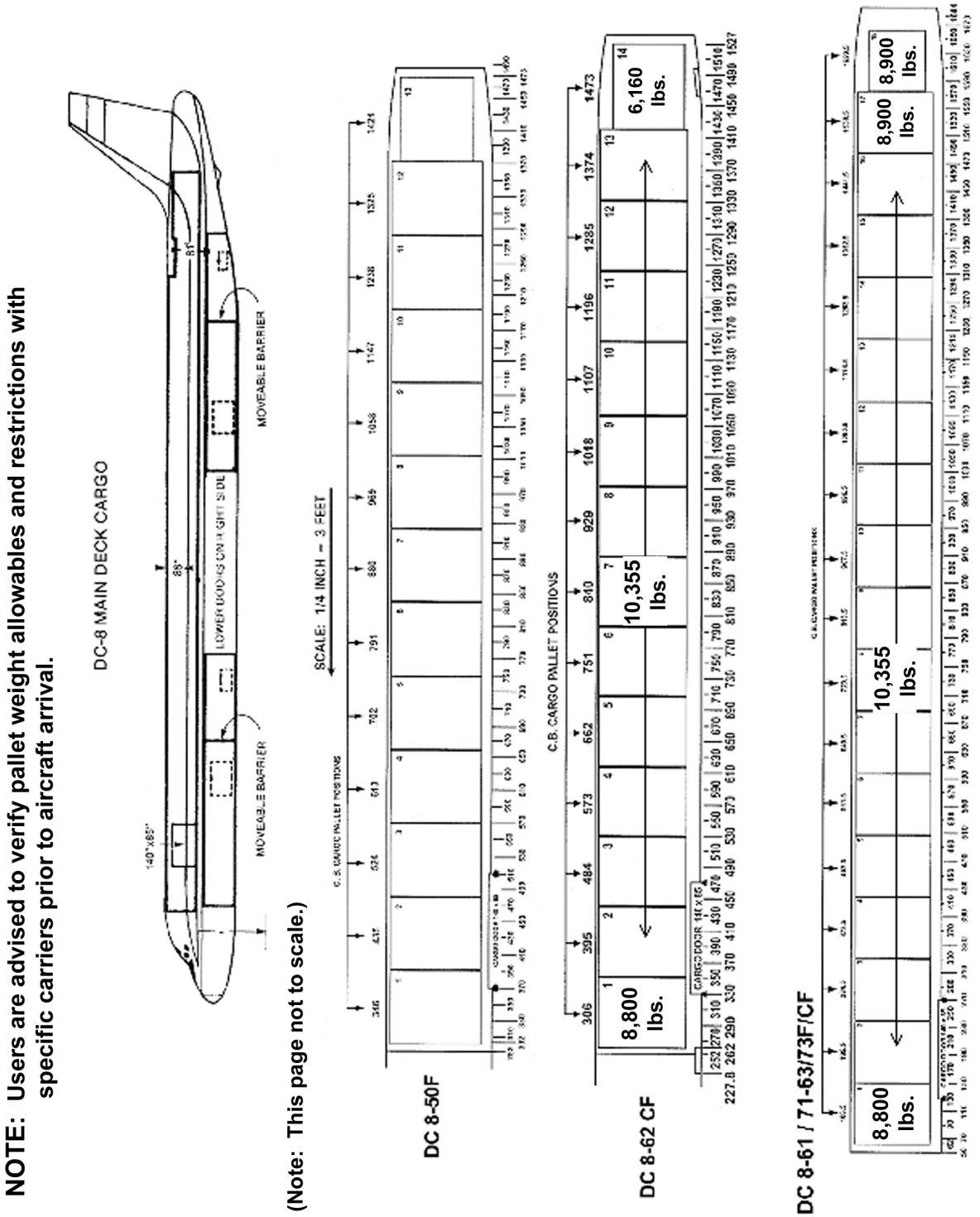


Figure 5. DC 8 Cross Section.

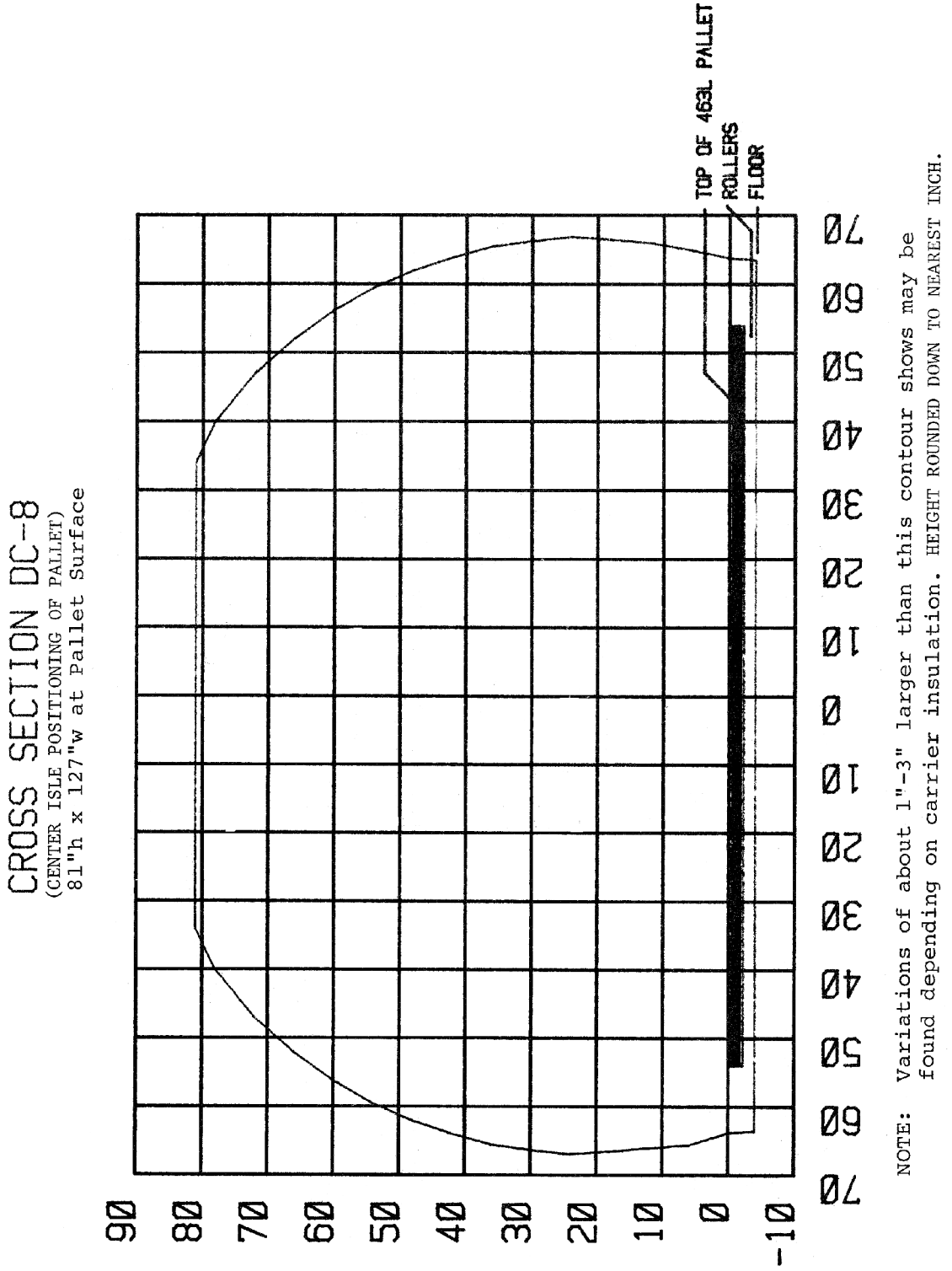
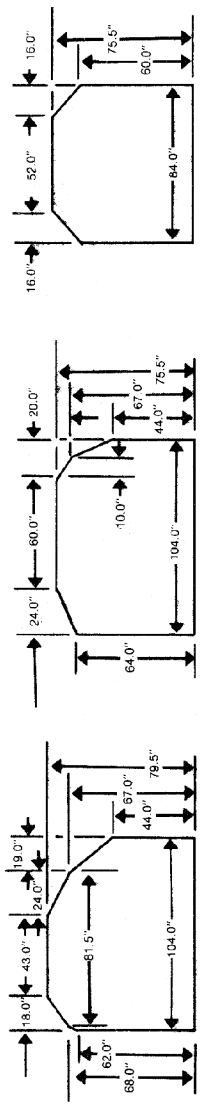


Figure 6. DC 8 Pallet Profile.

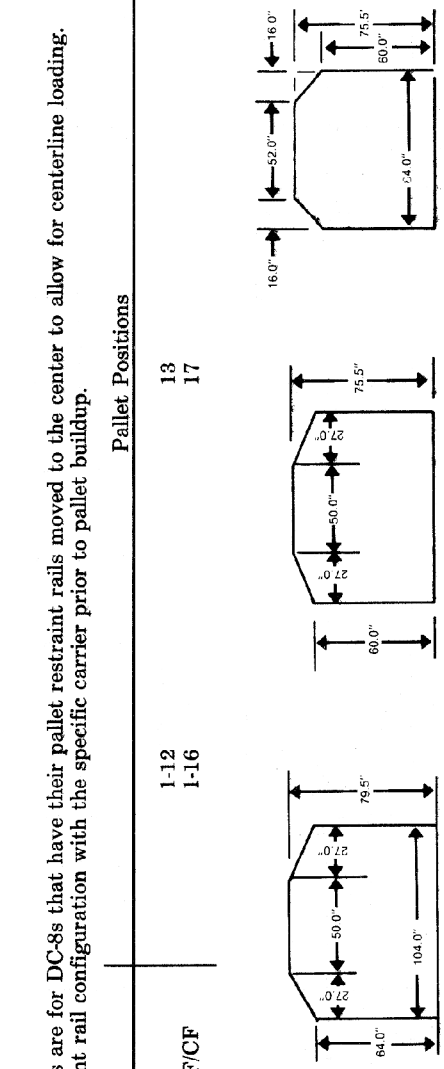
1. In this configuration the pallet rails are moved in on only one side to accommodate the 108-inch pallet. The 44-inch high side is loaded on the right side of the aircraft.
NOTE: confirm restraint rail configuration with the specific carrier prior to pallet buildup.

Aircraft	Pallet Positions	
DC-8-62F/CF	12	13
		14
All DC-8-61, 63, 71, 73F/CF	16	17
		18



2. These pallet profiles are for DC-8s that have their pallet restraint rails moved to the center to allow for centerline loading.
NOTE: Confirm restraint rail configuration with the specific carrier prior to pallet buildup.

Aircraft	Pallet Positions	
DC-8-62F/CF	1-12	13
		14
All DC-8-61, 63, 71, 73F/CF	1-16	17
		18

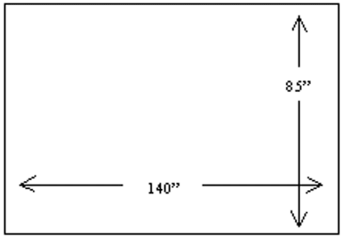


SIDE CARGO DOOR MAXIMUM HEIGHT CALCULATIONS:

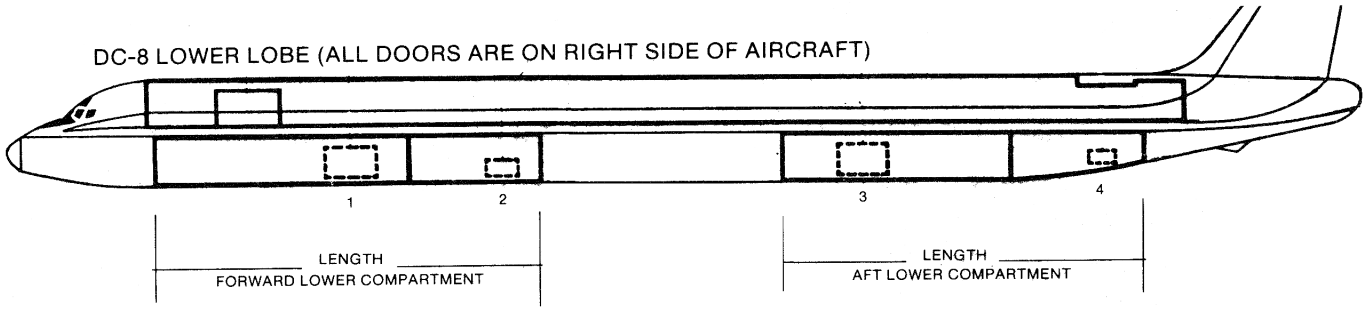
Door Height		85.00
Roller Height	-	1.25
Pallet Height	-	2.25
Top Clearance	-	2.00
Max Cargo Height		79.50

GENERAL RULES

1. ALL CARGO MUST BE ON A SUBFLOOR.
2. WOODEN SUB-FLOOR SHOULD BE AT LEAST 2" THICK.
3. PALLET WEIGHTS ARE FIGURED AT 290 LBS. PLUS 64 LBS FOR NETS/TIE DOWN EQUIPMENT.
4. ROLLING STOCK ON A 463L PALLET IS LIMITED TO 250 PSI.
5. ALL PALLET WEIGHTS ARE MAXIMUM AND INCLUDE THE WEIGHT OF PALLETS AND NETS.



Cargo Door Dimensions

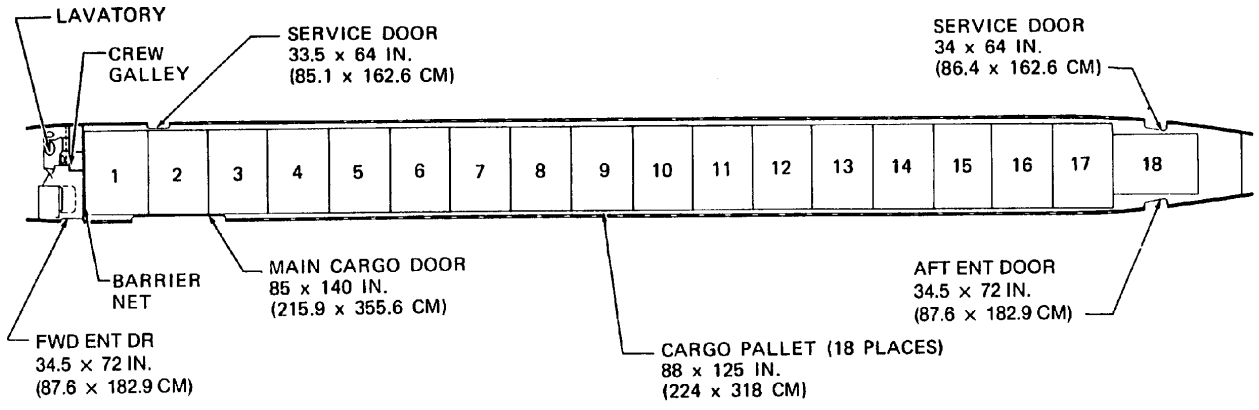


AIRCRAFT	FORWARD LOWER COMPARTMENT							AFT LOWER COMPARTMENT						
	DOOR #1		DOOR #2					DOOR #3		DOOR #4				
	WxH	MAX AGL	WxH	MAX AGL	LENGTH	2/ MAX WT	BULK CUBE 3/	WxH	MAX AGL	WxH	MAX AGL	LENGTH	2/ MAX WT	BULK CUBE 3/
DC-8-61CF/71CF	63"x54"	80"	44"x36"	82"	570"	19,350	1290	63"x54"	92"	44"x36"	100"	560"	18,150	1210
DC-8-62CF	44"x36" 1/	77"	44"x36"	82"	370"	12,000	800	44"x36" 1/	92"	44"x36"	100"	400"	12,225	815
DC-8-63CF/73CF	63"x54"	81"	44"x36"	82"	570"	19,350	1290	63"x54"	92"	44"x36"	100"	560"	18,150	1210

NOTES:
1/ Door size may be 63"x54" on some aircraft.
2/ 15 lbs/cu ft structural floor limit.
3/ The area immediately adjacent to these doors is unusable for cargo placement and represents an approximate 18 percent loss of space due to the facilitation of belly door opening and closing.

Figure 7. DC 8 Side Cargo Door Dimensions and Lower Lobe Dimensions. (All Series)

Figure 8. DC-8 Interior Arrangement for Cargo Pallets (88"x 125") -61F, -63F -71F, -73F



PALLETS 1 THROUGH 17	7711.2 CU FT (218.4 CU M)
PALLET 18	460 CU FT (13.03 CU M)
LOWER DECK CARGO	2500 CU FT (70.8 CU M)
TOTAL CARGO	10671.2 CU FT (302.23 CU M)

Interior Arrangements, Cargo
Models: DC-8-61F, -63F, 71F, 73F

Figure 9. DC-8 Interior Arrangement for Cargo Pallets (88"x 125") -50F, -62F/CF

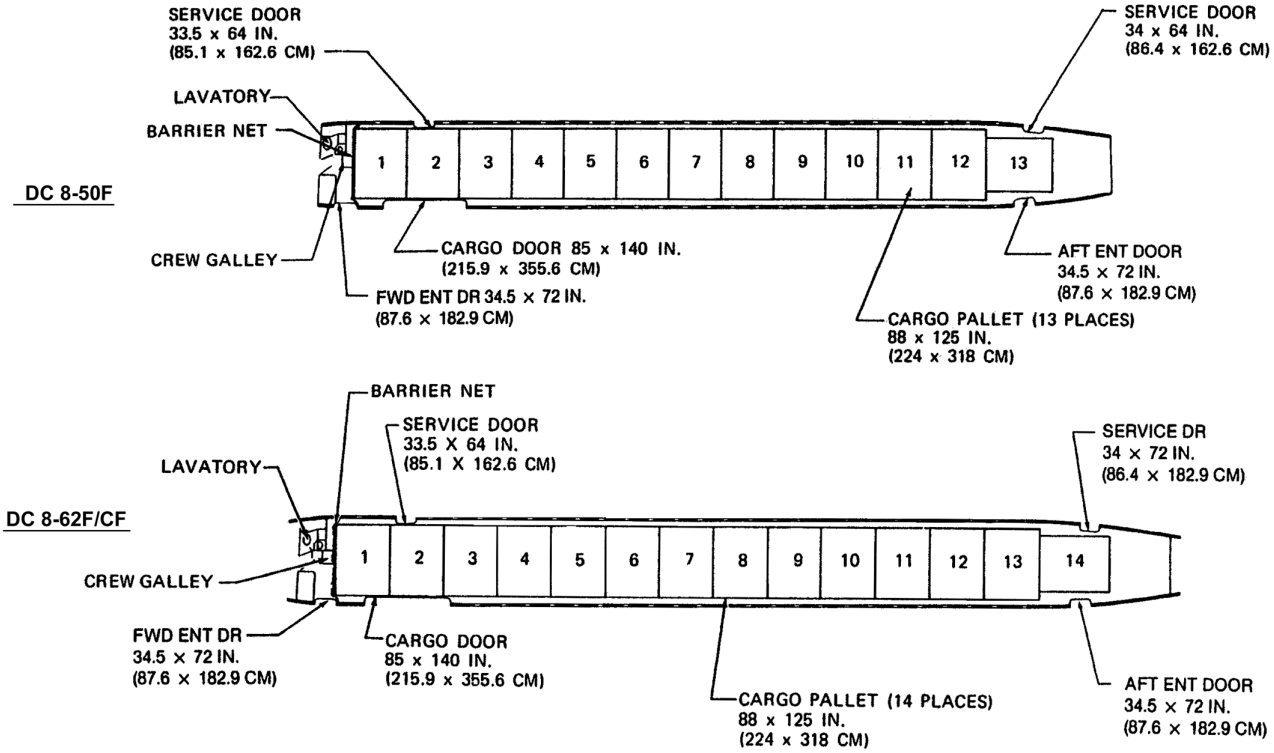


Table 1. DC-8 Aircraft Cargo Dimensions Chart.

NOTE: Chart values show maximum length in inches for given height and width. Reduce package height by thickness of cargo handling system when bulk loading with the palletized cargo system installed.

MAIN DECK:

Pkg Ht. (inches)	Package Width (inches) 6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	128
6 thru 48	1170	361	688	566	478	414	367	330	299	272	249	230	213	199	185	175	165	158	151	146	140
54	1128	630	660	547	463	403	359	323	293	255	245	225	210	196	184	174	164	157	149	144	
60	1012	738	600	503	433	383	342	308	280	257	237	220	206	192	181	171	162	154	147	140	
66	760	630	620	445	389	346	312	283	259	239	221	206	193	183	171	161	152	144			
72	629	518	441	385	340	305	278	253	233	216	202	189	178	167	157	148	140				
78	496	421	366	327	294	267	245	226	209	195	182	170	150	149	140						
84	369	325	294	263	239	219	202	188	174	161	148	136									

LOWER DECK:

Pkg Height (inches)	Package Width (inches) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	52
3	264	264	264	264	265	243	221	203	185	170	155	145	135	130	126	114	103	100
6	264	264	264	264	250	231	213	196	180	166	152	142	132	127	122	111	100	97
9	264	264	264	265	237	221	205	190	175	162	150	140	130	125	120	109	98	95
12	264	264	264	251	229	213	197	183	170	158	147	137	127	122	117	106	95	92
15	264	264	250	240	221	205	190	177	165	155	145	135	125	120	115	104	93	90
18	264	264	250	231	213	199	185	171	157	148	140	130	120	115	110	100	90	87
21	264	270	240	227	205	192	180	165	150	142	135	124	115	110	105	96	88	85
24	264	257	232	215	200	187	175	161	147	138	130	120	110	106	102	93	85	82
27	265	245	225	210	195	182	170	157	145	135	125	115	105	102	100	91	83	80
30	252	233	215	201	187	173	160	148	137	128	120	111	102	98	95	87	80	77
33	240	222	205	192	180	165	150	140	130	122	115	107	100	95	90	84	78	75
36	215	201	187	175	165	151	137	128	120	110	100	93	87	83	80	75	70	67
39	190	180	170	160	150	137	125	117	110	97	85	80	75	72	69	66	63	60
42	147	138	130	122	115	106	95	90	85	77	70	66	62	59	56	52	49	46
45	105	97	93	86	70	72	65	62	60	57	56	52	50	46	43	39	35	32

Table 2. DC-8 Model Comparison.

		DC-8 61F	DC-8 62F	DC-8 63F	DC-8 71F	DC-8 73F
Maximum Taxi Weight	**Pounds**	**331,000**	**353,000**	**358,000**	**331,000**	**358,000**
	Kilograms	**150,142**	**160,121**	**162,389**	**150,142**	**162,389**
Operating Weight (Empty)	**Pounds**	**145,506**	**138,560**	**141,330**	**152,700**	**149,200**
	Kilograms	**66,002**	**62,851**	**64,170**	**69,265**	**67,677**
Maximum Payload	**Pounds**	**884,494**	**91,440**	**119,670**	**81,300**	**111,800**
	Kilograms	**40,141**	**41,477**	**54,282**	**36,878**	**50,712**
Cargo Volume (Max)	**Pounds**	**12,171**	**9,737**	**12,830**	**12,171**	**12,830**
	Kilograms	**345**	**276**	**363**	**345**	**363**
Useable Fuel	**Pounds**	**23,393**	**24,275**	**27,275**	**23,393**	**24,275**
	Kilograms	**88,552**	**91,891**	**91,891**	**88,552**	**91,891**

ROGER A. BRADY, Maj Gen
Director of Operations

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Abbreviations and Acronyms

ABC—aft. bulk compartment

ACL—Allowable Cargo/Cabin Load

AESS—Aeromedical Evacuation Ship Set

AFB—Air Force Base

AFR—Air Force Regulation

AGL—Above Ground Level

TALCE—Tanker Airlift Control Element

ALCS—Airlift Control Squadron

ALS—Airlift Squadron

AMC—Air Mobility Command

AMCOS—Air Mobility Combat Operations Staff

AMCP—Air Mobility Command pamphlet

AMCR—Air Mobility Command regulation

APC—Armored Personnel Carrier

APS—Aerial Port Squadron

ASD—Aeronautical Systems Division

ATA—Air Transport Association

AW—Airlift Wing

BL—Butt Line

CB—Center of balance (or center of gravity)

CCE—Commercial Construction Equipment

CF/F—Convertible Freighter Or Freighter

CFR—Code of Federal Regulations

CG—Center Of Gravity (Or Center Of Balance)

CIV—Civilian/Civil

CL—Center Line

CLL—Center Lower Lobe

COMBI—Combination

COMM—Commercial

CONF—Configuration

CRAF—Civil Reserve Air Fleet

CU FT—Cubic Feet

DDT—Double Dual Tandem Type Landing Gear (B-747 etc.)

DIST—Distance

DOD—Department of Defense

EST.—Estimate

ELEV—Elevator

FAA—Federal Aviation Administration

FAR—Federal Aviation regulation

FLL—Forward Lower Lobe

FS—Flight Station Or Fuselage Station

GACL—Guaranteed Allowable Cabin (Or Cargo) Load

HGT—Height

HQ—Headquarters

IATA—International Air Transport Association

IN.—Inches

JSCP—Joint Strategic Capabilities Plan

LAT.—Laterally

LBL—Left Butt Line

LCN—Load Classification Number

LONG—Longitude

LOX—Liquid Oxygen

LOSS—Liquid Oxygen Subsystem

MAC—Mean Aerodynamic Chord

MAX—Maximum

MHE—Material Handling Equipment

MIL—Military

MOS—Medical Oxygen Subsystem

MSU—Multi-Servicing Unit

MTMC—Military Traffic Management Command

MTOW—Maximum Take Off Weight

MLW—Maximum Landing Weight

MZFW—Maximum Zero Fuel Weight

N/A—Not Applicable

NM—Nautical Mile (Statute Mile X 1.15)

OEW—Operating Empty Weight

OL—Operation Location

PAX—Passenger

PDO—Publications Distribution Office

PLF—Pounds Per Linear Foot

PLI—Pounds Per Linear Inch

PLS—Patient Loading System

PP—Pallet Position

PSF—Pounds Per Square Foot

PSI—Pounds Per Square Inch

RBL—Right Butt Line

RWY—Runway

SBTT—Single-Belly Twin Tandem Landing Gear (DC-10, KC-10 etc.)

S/T—Short Ton (2,000 lbs.)

SPR—Single Point Refueling

STN—Station

TACC—Tanker Airlift Control Center

TAW—Tactical Airlift Wing

TO—Technical Order

T/O—Takeoff

TT—Twin Tandem (DC-8, B757, B767)

UKN—Unknown

WDT—Width

WBEL—Wide Body Elevator Loader

WL—Water Line

WRSK—War Readiness Spares Kit

WT—Weight

ZFW—Zero Fuel Weight

ATTACHMENT 2

INTERNATIONAL CARGO AND PASSENGER PLANNING FACTORS

Table A2.1. CRAF LONG-RANGE INTERNATIONAL CARGO PLANNING FACTORS

Aircraft Type	Maximum ACL (s/t)	Pallets	Range with Maximum ACL (nautical mi)	Maximum ACL (s/t) per Leg Length (nautical mile)				Ferry Range No Cargo (nautical mi)
				2,000	2,500	3,000	3,500	
A300-600F	56.6	15	1,800	54	52.5	46	40	4,450
B-757-200F	43	13	3,600	43	43	43	43	4,850
B-767-300F	65.9	26	3,500	65.9	65	65.9	65.9	7,150
DC-8-55F	43.8	13	2,400	43.8	42.5	37	31.5	4,700
DC-8-62F	44	14	3,500	44	44	44	44	5,600
DC-8-62 Combi	36	10	3,450	36	36	36	35.5	5,700
DC-8-63F	55	18	2,250	55	52.3	47.5	42.8	4,600
DC-8-71F	48.5	18	2,300	48.5	45	38.5	32.3	4,700
DC-8-73F	54.3	18	2,500	54.3	54.3	50.3	43.5	4,800
B-747-100F	106.5	33	3,200	106.5	106.3	106.5	99.8	6,800
B-747-200F	120	33	3,200	120	120	120	112	7,900
B-747-300F	116	33	3,100	116	116	116	113.5	7,900
B-747-400F	129.7	33	3,800	129.7	129.7	129.7	129.7	8,650
DC/ MD-10-10F	69.3	30	2,000	69.3	61.25	54.6	46.7	4,200
DC-10-30CF	71.8	30	3,000	71.8	71.8	71.8	69.5	6,700
DC/ MD-10-30F	83.1	30	3,600	83.1	83.1	83.1	83.1	6,700
MD-11CF	89	35	4,500	89	89	89	89	7,800
MD-11F	96	35	3,750	96	96	96	96	7,800
L-1011-200F	63	26	2,600	63	63	55.5	48.5	3,750

NOTE: **Ferry Range is distance the aircraft can fly with no cargo**

Table A2.2. CRAF LONG-RANGE INTERNATIONAL PASSENGER PLANNING FACTORS

Aircraft Type	Maximum Seats (Troops)	Range with Maximum Troops (NM)	Maximum Troops per Leg Length (NM)				Ferry Range No Troops (NM)
			2,000	2,500	3,000	3,500	
A-300-600ER	138	3,200	138	138	138	120	4,260
B-757-200	127	2,300	127	120	103	85	4,400
B-757-200ER	131	3,175	131	131	131	116	4,700
B-757-300ER	166	2,700	166	166	150	126	4,400
DC-10-10	222	2,300	222	201	150	100	4,000
DC-10-30	235	3,900	235	235	235	235	5,800
DC-10-40	222	2,750	222	222	203	160	4,875
DC-10-40J	219	3,200	219	219	219	195	4,856
MD-11	233	5,000	233	233	233	233	6,800
MD-11ER	338	4,500	338	338	338	338	6,800
B-747-100	394	2,900	394	394	365	313	6,600
B-747-200	365	3,800	365	365	365	365	7,600
B-747-400	295	6,250	295	295	295	295	8,650
B-767-200	149	2,450	149	145	120	98	7,500
B-767-200ER	161	3,650	161	161	161	161	7,700
B-767-300	186	3,375	186	186	186	167	6,800
B-767-300ER	213	3,500	213	213	213	213	7,200
B-767-400ER	232	3,500	232	232	232	232	6,500
B-777-200	250	4,200	250	250	250	250	9,200
B-777-200ER	263	5,515	263	263	263	263	9,500
L-1011-50	225	2,300	225	215	183	140	4,000
L-1011-100/150	230	2,900	230	230	220	174	4,400
L-1011-500	223	4,100	223	223	223	223	6,000

NOTE: **Troop weights are calculated at 400 pounds each, which includes personal equipment and field gear for combat operations.**